

REMARKS

Claims 1-31, and 37-43 are pending in the application. Claims 1, 11, 13, 19, 25, 38, and 43 have been amended herein. New claims 44 and 45 have been added herein. Favorable reconsideration of the application, as amended, is respectfully requested.

I. REJECTIONS OF CLAIMS 1-31 AND 37-43 UNDER 35 U.S.C. § 103

Claims 1-31 and 37-43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable based on various combinations of references. All rejections have in common U.S. Patent No. 6,449,250 ("Otani") and U.S. Patent No. 6,148,410 ("Baskey"). Applicants believe that all pending claims are allowable for at least the following reasons. Withdrawal of the rejections is respectfully requested.

One of the features recited in independent claims 1, 11, 13, 19, 25, 38, and 43 is directed to "pre-registration" of a cable modem with a protection CMTS. Specifically, claims 1, 11, 19, 25, 38, and 43 require "registering the cable modem with the protection CMTS ... prior to the working CMTS becoming unavailable." Independent claims 1, 11, 13, 19, 25, 38, and 43 have been amended to further clarify one of the aspects of the invention. Specifically, Independent claims 1, 11, 19, 25, 38, and 43 further require reception of a notification from a cable modem at a protection CMTS, i.e., "wherein registering the cable modem with the protection CMTS comprises receiving a notification from the cable modem, at the protection CMTS." Independent claim 13 contains recitations similar to those of claims 1, 11, 19, 25, 38, and 43 as identified above. Support for the amendments is found throughout the present specification. See, for example, page 13, lines 1-6; page 14, lines 13-21; page 16, lines 14-22; and page 29, lines 25-27 of the present specification. No new matter has been introduced by these amendments.

As described at, for example, page 16, lines 14-22 of the present specification, the invention defined in independent claims 1, 11, 13, 19, 25, 38, and 43 is directed to registration of a cable modem in which a protection CMTS receives a notification from the cable modem. For example, a specific exemplary embodiment of the invention involves a cable modem registration process where a cable modem notify a protection CMTS of the IP address that it has obtained during an initial registration through the working CMTS. This notification may serve as a part of the DOCSIS registration process with the working CMTS. In this embodiment, the cable modem may or may not complete a complete registration (ranging and the like) with the protection CMTS. None of the cited references teach or suggest this reception of a notification from the cable modem at the protection CMTS as claimed.

The Otani patent generally relates to switching a plurality of central devices. As the Examiner acknowledges in the Office Action, the Otani patent fails to teach or suggest the

claimed pre-registration. The Baskey patent is concerned with sending updates from the active router 100 to the standby router 105. See, column 4, lines 54-67. As described at column 4, line 61-63, the “active and standby routers 100, 105 are synchronized ... between the two routers.”

Such synchronization between the two routers does not involve receiving any information from the clients 110 (*Id.*). It is respectfully submitted that Baskey’s synchronization between the two routers in no way suggests, implicitly or explicitly, that registering the cable modem with the protection CMTS includes receiving a notification from the cable modem at the protection CMTS. Notification from the cable modem, as recited in the claims, would allow, for example, ranging and other procedures specific to the communication between the standby router and a cable modem, and would not be possible of synchronization of the Baskey patent. Therefore, the Baskey patent cannot be said to cure the deficiencies of the Otani patent.

Other references were cited as describing various claimed features relating to, e.g., DOCSIS parameters or a voice over internet protocol (VoIP) application. However, these references are silent on the claimed pre-registration aspect of the invention in which registering the cable modem with the protection CMTS includes receiving a notification from the cable modem at the protection CMTS. As such, the other references also fail to teach or suggest the claimed pre-registration feature with receiving notification from the cable modem at the protection CMTS, as recited in independent claims 1, 11, 13, 19, 25, 38, and 43.

In summary, Applicants find nothing in the prior art that suggests the claimed pre-registration feature as recited in independent claims 1, 11, 13, 19, 25, 38, and 43. Therefore it is respectfully submitted that the invention defined in independent claims 1, 11, 13, 19, 25, 38, and 43, and their dependent claims is patentable over the cited art. Withdrawal of the rejections is respectfully requested.

II. NEW CLAIMS 44 AND 45

Claims 44 and 45 have been added herein. Support for these claims is found at, for example, page 13, lines 12-21 of the specification. According to a specific embodiment of the invention, after pre-registration, but before cutover, the protection CMTS remains in a “protection state” ready to take over service to the cable modem when it determines that the modem’s working route has failed. While in the protection state, the protection CMTS may periodically ensure that it is ready to take over service to the cable modem. This may entail that the protection CMTS determine that the protection path between the protection CMTS and the cable modem still works. If communication can take place over the path, the protection CMTS may request that the cable modem change certain parameters to optimize communication if a cutover becomes necessary.

Claims 44 and 45 requires that "after registration, but before the protection CMTS takes over, requesting that the cable modem change one or more parameters to optimize communication on a path between the protection CMTS and the cable modem." None of the cited references teach or suggest requesting that the cable modem change at least one parameter during the claimed specific time frame, i.e., "after registration, but before the protection CMTS takes over" in order to optimize communication between the protection CMTS and the cable modem. The cited references are not concerned with optimizing communication on a path between the protection CMTS and the cable modem in this claimed time frame. Therefore, in addition to reasons set forth above in connection with claims 1, 11, 13, 19, 25, 38, and 43, claims 44 and 45 are believed to be allowable over the cited art in this regard as well.

III. CONCLUSION

Applicants believe that all pending claims are in condition for allowance, and respectfully request a Notice of Allowance at an early date. If the Examiner has any continuing concerns about patentability of the claimed invention, he is encouraged to telephone the undersigned at 510-843-6200, ext 245.

Respectfully submitted,
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Limited Recognition under 37 CFR § 10.9(b)

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